# Digital accessibility: achieving great CX for all

**INVIQA®**

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*Accessibility research can help us better understand how people with disabilities use the web and what we, in product design and development, can do to make that experience more successful and enjoyable[1].*

**Jonathan Lazar, computer science professor, Towson University**

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1   Accessibility Research Methods with Jonathan Lazar, 2014

# About this report

There is a **clear business case** for designing inclusive digital products. And with compelling financial, legal, moral, and usability benefits, digital accessibility should be on every brand's radar.
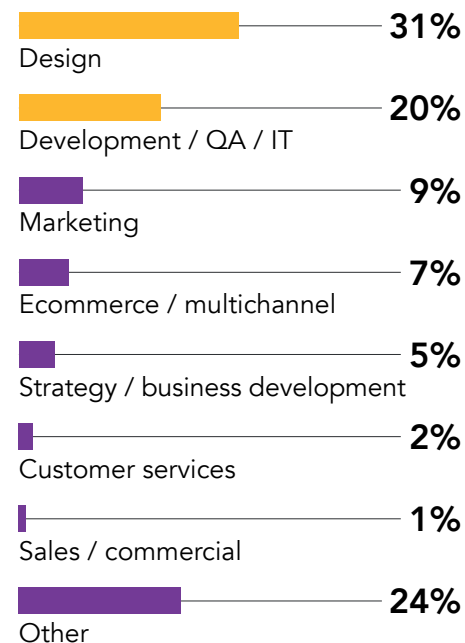
But this isn't the case today. Digital products and services are failing to meet the needs of the **more than 1 in 5 UK customers** with digital access requirements[2], and less than 1% of website homepages meet basic web accessibility standards[3].

To help understand why this is the case, we spoke with brands across a range of industries to:
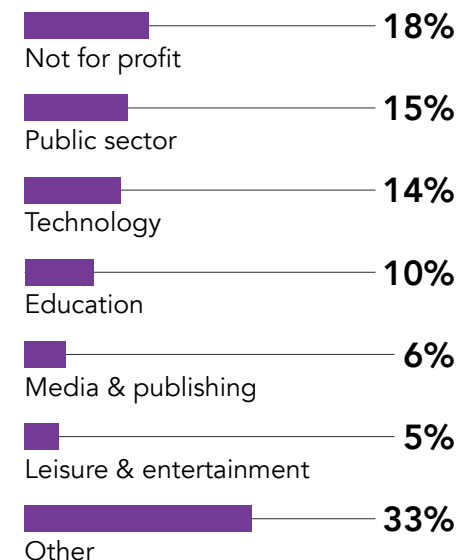
- identify barriers to advancing the accessibility agenda
- explore how organisations can tackle those barriers
- help more organisations progress towards inclusive digital design

This report uses research conducted with more than 100 professionals involved in crafting digital products and services in the UK. We ran a multiple-choice online survey between January and February 2020, with design and development professionals representing the largest demographic (51%).

## Job function

| | |
|---|---|
| Design | 31% |
| Development / QA / IT | 20% |
| Marketing | 9% |
| Ecommerce / multichannel | 7% |
| Strategy / business development | 5% |
| Customer services | 2% |
| Sales / commercial | 1% |
| Other | 24% |

## Industry breakdown

| | |
|---|---|
| Not for profit | 18% |
| Public sector | 15% |
| Technology | 14% |
| Education | 10% |
| Media & publishing | 6% |
| Leisure & entertainment | 5% |
| Other | 33% |

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2    Office for National StWs (ONS)
3    The WebAIM Million accessibility analysis of 1,000,000 home pages

# The business case for
# digital accessibility

## The scale of digital access needs

22% of UK consumers have disabilities[4], but the true percentage of people with digital access needs is **much higher than this**.

This is because user capability is a spectrum; many people with physical, sensory, and cognitive impairments do not identify as disabled, but still face significant problems when accessing digital products and services.

The scale of these needs will continue to grow. Our aging population[5] means that more people are becoming disabled in later life[6]. At the same time, internet usage amongst disabled adults is rising[7] as the internet plays a more important role in commerce and other areas of life.

*The growing proportion of UK consumers with digital access needs will demand access to a wider range of digital products and services.*

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4    Family Resources Survey, 2016/17, Department for Work & Pensions
5    By 2030, 22% people in the UK will be aged 65 or over (ONS)
6    ONS Living Longer survey, 2018
7    Internet users, UK (GOV.UK)

# The financial case for accessibility

Brands who fail to cater to UK customers with digital access needs are **missing a key economic opportunity**. The purchasing power of the disabled community is worth a huge £274 billion[8], and businesses that fail to meet the needs of disabled consumers could be turning away a share of £420 million each week[9].

What's more, research confirms that inclusive design affects how disabled people spend their money; when businesses fail these customers, most will choose to abandon the purchase or find another company with a more accessible website.

Investing in accessibility also helps avoid the costs and damages associated with legal proceedings – costs which can continue long after an initial lawsuit[10].

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8    According to Scope's analysis of the ONS Household Below Average Income Survey for 2017 to 2018
9    The Extra Costs Commission, 2015
10   21% of accessibility lawsuits in 2019 were against companies who had been sued previously, according to the Usablenet accessibility lawsuit report, 2019
11   The Click-Away Pound Report, 2016
12   Nucleus Accessibility Research, 2019
13   The Click-Away Pound Report, 2016
14   Scope Big Hack, November 2019

## A lost economic opportunity

**82%** of customers with access needs would spend more if websites were more accessible[11].

**$6.9 bn** is lost to accessible ecommerce competitors annually[12].

**71%** of disabled customers will click away from a website they find difficult to use[13].

**48%** of 'click-away' disabled customers will find a different provider and make a purchase elsewhere[14].

> *I would like to spend more than I currently do, but I can't because it's such a laborious task. If websites, apps, and stores were more accessible, then I'd spend more because I'd have no restrictions.*
>
> **disabled participant from Scope's Big Hack Survey**

## The cost of retro-fitting accessibility

Brands spend more time and money when accessibility is retrofitted, rather than built in from the outset.

- *'Cost-cutting on inclusivity can result in higher costs later on as products are deemed unusable, leading in turn to product returns and costly helpdesk calls. Retro-fitting a product to be inclusive also incurs extra costs'.*
  – **Inclusive Design and the Bottom Line**[15]

- *'Our focus is on becoming much more cost effective by building accessibility into all our processes. That way, it's there right from the start. Just business as usual'.*
  – **Geoff Mossman, head of customer vulnerability, group transformation, Lloyds Banking Group**

## The legal case for accessibility

Digital accessibility is a **regulatory requirement** and so non-compliance comes at a significant legal risk, with associated financial costs.

Any multinational brand with online services in the US market is at significant legal risk if their digital services exclude users. Here at Inviqa we're already working with UK brands facing costly legal action in the US.

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15   https://link.springer.com/chapter/10.1007/978-3-642-39188-0_8

> *The ethical right of disabled people to inclusive design is becoming a legal one.*
>
> **Scope**

UK-only brands cannot assume immunity; legislation around this area is changing all the time, and **international developments set precedent for UK law**. What's more, legal action in the UK doesn't tend to make the headlines since it's usually settled outside court to minimise damage to brand reputation.

### The Equality Act 2010

This legislation made it illegal to exclude or discriminate against people on the grounds of disability. Organisations must avoid 'indirect discrimination' and provide an equal service to customers with access needs.

Breaching the Equality Act is a civil (rather than criminal) offence, but there are examples of where organisations have launched private legal action – for example, RNIB launching legal action over the accessibility of the bmibaby website.

### The Sale of Goods Act 1979

Can a customer using a screen reader add things to the basket on your site? If people are unable to complete a purchase using your app or website on the grounds of disability, you could be breaking the law.

## Public Sector Bodies Accessibility Regulations 2018

As of summer 2019, public sector websites have had to comply with Web Content Accessibility Guidelines (WCAG) 2.1 AA standards. Under the EU's Web Accessibility Directive, public sector websites created before September 2018 must comply by September 2020, and mobile apps by June 2021.

## Web Content Accessibility Guidelines (WCAG)

For now, the Web Content Accessibility Guidelines (WCAG 2.1) and British Standard 8878 are the best places to determine whether your site is compliant.

## International regulations

Brands that deliver digital products and services to markets outside the UK need to comply with regulatory frameworks specific to those markets.

As an example, all websites based in Norway must meet WCAG 2.0 standards. In the US, Americans with Disabilities Act (ADA) lawsuits were filed at a rate of one-per-hour in 2019[16]. ADA was also the basis for the high-profile lawsuit against international brand, Domino's Pizza.

16   ADA web accessibility and app lawsuit report, 2019, UsableNet

> *I switched from the Sainsbury's app to the Tesco app for my online weekly shopping due to (in)accessibility.*
>
> **Big Hack survey participant**

# The usability case for accessibility

An important and often overlooked benefit of inclusive design is the **universal usability advantage** it delivers. Accessibility needs form a broad spectrum, and can be permanent, temporary, or situational. That's why designing for the more rare or 'extreme' use cases presented by disabled customers actually means building digital products that are much more usable for everyone.

There are countless online and offline examples of where solving a user problem for people with disabilities improves the user experience for everyone. At a time where customer experience is the top brand differentiator, accessibility can help brands to stand out from the crowd and build brand loyalty and trust.

## Accessibility impacts usability and brand perception

- Brands that are perceived to 'improve people's lives and the role they play in society' generate significantly higher KPIs when it comes to purchase intent, repurchase intent, and brand advocacy[17].

- 63% of consumers prefer to purchase products and services from companies that stand for a purpose or align with their own values[18].

17  Meaningful Brands® study
18  'The Rise of the purpose-led brand' report, Accenture

# The moral case for accessibility

Digital products and services have the potential to hugely benefit people with digital access needs, allowing them to shop, communicate, learn, and participate in society in ways that might otherwise be difficult or unavailable. Where they exclude users, these services create barriers that can exclude people from full social and economic participation.

## *'The internet doesn't belong to me'*

49% of disabled people feel excluded from society, and attitudes towards digital technology are playing a part[19].

As part of its Big Hack survey, charity Scope asked how disabled users feel when they're unable to complete a task online. The findings showed that bad accessibility makes customers feel like they are the problem:

- *'It makes me feel like the internet doesn't belong to me, and that it's not a welcoming place'*
- *'It makes me feel frustrated and angry with my body. It lowers my confidence, making me feel less independent'*
- *'It makes me feel very frustrated because online is my gateway to a "normal" life'*
- *'Isolated. Excluded. Alone. Frustrated. Unimportant to society'*

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19   Let's Talk Report, Scope

# Only
# 4%

of digital products meet accessibility guidelines.

# Where are brands today?

## Technical compliance

Just 4% of our survey respondents strongly agree that their digital products currently meet WCAG or equivalent accessibility guidelines. The good news is that organisations appear to recognise the **need for technical compliance** and are taking action, with 44% agreeing or strongly agreeing that they will meet WCAG 2.0 or 2.1 level AA compliance within the next 12 months.

*'My organisation will be compliant within the next 12 months'.*
Survey participants shared how strongly they agree with this statement.

**31%**
Agree

**27%**
Unsure

**19%**
Disagree

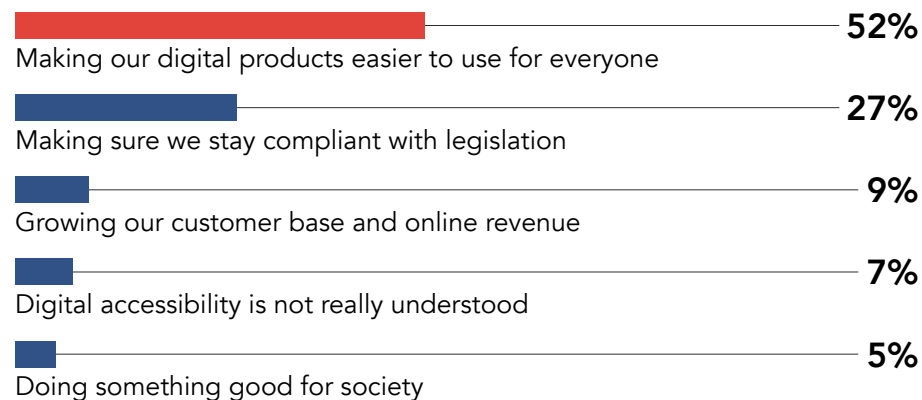**13%**
Strongly agree

**11%**
Strongly disagree

## The top drivers for accessibility

Our survey findings suggest that the **universal usability benefits of accessibility** are the biggest driver (52%) for adoption, followed by the legal reasons (27%).

However, this may reflect the fact that design and UX professionals represented our largest demographic. Their understanding of the usability benefits of digital accessibility might not be representative of the wider businesses. In fact, 7% say that their organisation does not understand accessibility or the business case for digital inclusion.

**The biggest drivers for accessibility**

**52%**
Making our digital products easier to use for everyone

**27%**
Making sure we stay compliant with legislation

**9%**
Growing our customer base and online revenue

**7%**
Digital accessibility is not really understood

**5%**
Doing something good for society

## Progress to date

The good news is that 77% of our survey respondents have **started their accessibility journey** in some capacity, whether that's through sending teams on accessibility training or commissioning an audit.

What's concerning is that 75% of respondents say their organisation has not commissioned an **external accessibility audit** with an accessibility specialist. Online and internal audits provide a great starting point for addressing accessibility 'quick wins', but collaborating with an accessibility specialist is the most effective way to achieve a prioritised roadmap of recommendations and improvements.

### Encouraging signs

- More than a third (35%) have sent teams on **accessibility training** courses.

- 48% have made changes to digital products to **improve compliance** with accessibility guidelines.

- Our findings suggest that design teams may be driving change, with 40% of respondents saying that they've created **reusable design components** with accessibility in mind, even where organisations have not invested in preliminary measures such as accessibility audits.

## Still a long way to go

- 75% are yet to commission an **external accessibility audit** with a specialist.

- Less than 1% of website home pages meet basic web accessibility standards[20].

- 65% of organisations are yet to do any **accessibility testing** with customers with access needs, which is the only way to ensure true accessibility. But this likely reflects the fact that technical compliance typically proceeds user testing and is the focus of initial accessibility initiatives.

- 1 in 5 people with digital access needs say that they are unable to complete a task online 'Very often' or 'Quite often'[21].
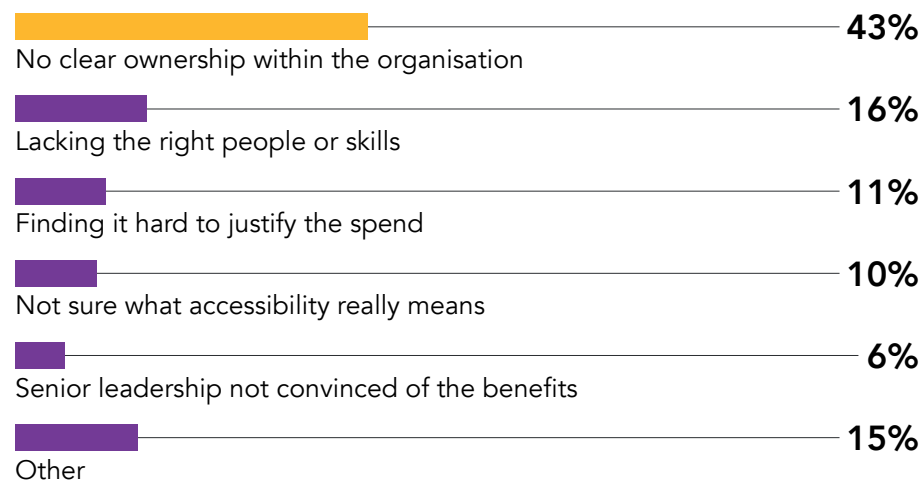
20   WebAim Million
21   The Big Hack Survey by Scope, 3 March, 2020

# 85%

say businesses lose out when they don't cater to digital access needs.

# Barriers to progress

**What's the biggest barrier to accessibility?**

No clear ownership within the organisation — **43%**

Lacking the right people or skills — **16%**

Finding it hard to justify the spend — **11%**

Not sure what accessibility really means — **10%**

Senior leadership not convinced of the benefits — **6%**

Other — **15%**

## The education and awareness challenge

85% of our survey participants agree or strongly agree that **businesses lose out** when they don't cater to users with digital access needs. Despite this, there is a clear need to improve awareness and understanding of these needs.

## Compliance vs. accessibility

More than a third of respondents (34%) don't know whether a WCAG-compliant website is a fully accessible website. In reality, **WCAG compliance is no guarantee of true accessibility**; you need to test with real users.

## The scale of access needs

73% were unable to identify the portion of the UK population with a disability or impairment (22%) and 81% were unable to identify the consumer spending power of UK disabled people, which is worth £274 billion[22].

## The diversity of access needs

- Access needs can be permanent, temporary, or situational, and they can be motor, sensory, or cognitive in their nature.

- It's encouraging that 81% of our respondents believe an individual with anxiety could have digital access needs, since cognitive access issues, relating to the likes of memory, attention, and language processing, represent the least understood and researched area of accessibility.

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22  According to the Scope's analysis of the ONS, Household Below Average Income Survey for 2017 to 2018

## Understanding common barriers

- In an open question, it was encouraging that respondents identified the most common accessibility barrier today: navigation.

- The next greatest barriers are not being able to complete checkout requirements such as CAPTCHA puzzles and difficulty registering online[23].

> **"**
>
> *Really informing people and making them aware is what I'd say is the biggest challenge to accessibility.*
>
> **Jonathan Lazar, professor of computer and information science at Towson University**
>
> **"**

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23  The Big Hack Survey by Scope

## Breaking knowledge silos

The largest education and awareness challenge relates to educating upwards and horizontally across an organisation. While awareness amongst our design-orientated data sample is good, their comments show the need for knowledge about the benefits of inclusive design to filter throughout the whole organisation.

- *'As a developer, I often have issues convincing people of the importance of accessibility and we are often seen as just being difficult'.*
  **– GreatCXForAll survey participant**

- *'Within the Digital team, we all understand its importance and work to incorporate accessibility considerations into everything, but the wider business isn't quite on the same page yet'.*
  **– GreatCXForAll survey participant**

- *'Accessibility is still often seen as a niche requirement. The insight isn't there to design the right things well from the outset, or that a better user experience benefits all our users'.*
  **– GreatCXForAll survey participant**

# The capability and governance challenge

## Structural barriers

Our findings highlight a lack of clear ownership, structure, and governance as a key barrier to progressing the accessibility agenda:

- Only 31% agree or strongly agree that digital **accessibility is seen as everyone's responsibility** within their organisations.

- Only 27% agree or strongly agree that digital accessibility has clear ownership within the business.

Our respondents nodded towards structural barriers that prevent them from taking a more structured approach to accessibility, such as **resource limitations** and the need to balance accessibility with other organisational requirements.

They also called out internal **deficit in skills and capabilities**, and expressed concern that accessibility was seen solely as a single individual's remit.

## Accessibility as an afterthought

Our findings indicate that accessibility is not being considered from the outset of the digital product lifecycle:

- Only 31% of organisations consider accessibility when **researching customers' needs**.

- Only 19% of consider accessibility when **deciding which digital products to build**.

Accessibility efforts are seemingly being driven by design and development teams, with 50% of organisations considering accessibility at the **design stage**, and 54% doing so at the **technical build stage**.

- *'We feel very early on in our accessibility journey, with so much more to do and no clear strategy or owner for it'.*
  – **GreatCXForAll survey participant**

- *'We have various digital assets with different product owners, and some with no clear product owner. There was no one person leading on accessibility until the new public sector regulations'.*
  – **GreatCXForAll survey participant**

- *'The continuation of accessibility has been overlooked. There is no clear senior management involvement...and people leaving the organisation means we have lost the ability to address accessibility'.*
  – **GreatCXForAll survey participant**

- *'There isn't enough emphasis on the importance of accessibility for those managing outsourced products to enforce accessibility standards'.*
  – **GreatCXForAll survey participant**

- *'Accessibility implementation works best when all parties are involved and make an effort from the beginning of a project'.*
  – **GreatCXForAll survey participant**

# Overcoming barriers

Our research suggests that accessibility awareness and understanding tends to reside within design teams. As such, empowering design and development teams to share knowledge and **advocate accessibility** across the organisation is key to adoption, although, of course, accessibility happens as a group effort and requires senior buy-in.

As Jonathan Lazar, Professor of Computer and Information Science at Towson University, puts it: *'because they're already going out there, informing people about usability and user-centred design, user experience professionals are in a great position to advocate accessibility'[24].*

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24   https://rosenfeldmedia.com/a-web-for-everyone/accessibility-research-methods-with-jona-than-lazar

## UX leading the charge

**"** *Our goal is to change things and educate the wider organisation about what accessibility actually means, so people are more engaged from the outset of a project.*
*– **GreatCXForAll survey participant***

**"** *I've been trying to educate the teams a little more about how accessibility is more than just physical disabilities, and that there are so many other factors where designing for accessibility is a benefit.*
*– **GreatCXForAll survey participant***

**"** *We are pulling together an inclusive design strategy, however there is no central team that is responsible for this and we, as the UX team, are making it our priority.*
*– **GreatCXForAll survey participant***

# Take action

The below table takes the key barriers identified in our research and distills them into key user needs and suggested next steps:

| User story / need | Next steps |
|---|---|
| • **We need to understand accessibility as a concept**<br><br>• **We need to convince others of the importance of accessibility** | • **Accessibility training** of your technical and non-technical staff is an effective way to improve understanding of accessibility guidelines and standards, and the diversity of access needs. It's key for helping different areas of the business to understand the need for organisation-wide collaboration.<br>• **Empower design and development** teams to drive learning programmes. Promote knowledge-sharing through the likes of Slack communities, lunch-and-learns, and workshops. |
| • **We need senior buy-in** | • Invite key stakeholders to observe **accessibility testing**. Watching real users with digital access needs using your products is one of the best ways to gain internal buy-in. |
| • **We need to confirm whether a digital product is accessible**<br><br>• **We need to understand how and where to make a digital product accessible** | • An **accessibility audit** provides an ideal means of understanding what you need to do to meet technical compliance. Online tools identify quick wins but don't provide the full picture, so be sure to collaborate with an experienced specialist.<br>• **Remedial code work** is required to deliver on your audit findings. Addressing a small number of the most impactful issues can improve your baseline dramatically. |

| User story / need | Next steps |
|---|---|
| • **We need more resource for accessibility** | • Develop a **business case** with supporting evidence and case studies. |
| • **We need to ensure accessibility processes are shared and enshrined** | • Review and evolve **design principles and assets**. Adapt design processes and promote their successes.<br>• Make **accessibility a part of technology procurement** guidelines. Only work with technology solutions and partners who meet your accessibility criteria. |
| • **We need to establish ownership** | • **Appoint a product owner:** accessibility is everyone's responsibility, but requires ownership. Your product owner, as a vital bridge role between strategy and digital product teams, is in a prime position to take accountability for accessibility. Make accessibility a core responsibility within the role, with supporting KPIs aligned to business goals. |
| • **We need to progress from compliance to true accessibility** | • **Accessibility testing** ensures usability once you've worked towards technical compliance. Unless you've tested your digital product with customers with real accessibility needs, you can't guarantee it's accessible. Focus on the methods that provide the required information to actually impact the design and improve accessibility. |

> **"**
> *The real driver for accessibility here is that we just want to get it right and deliver the best experience we can, to all our customers alike.*
>
> **Chris Golding, digital UX manager, SSE Energy Service**
> **"**

# Great CX for all

Technical compliance forms the basis of most organisations' accessibility efforts today, with a focus on meeting standards, guidelines, and legislation.

This is a helpful starting point, but accessibility needs to be viewed through a human lens, rather than a technical one. Likewise, it can't be viewed as a one-off project; accessibility is an ongoing effort and is about continually improving the customer experience.

By embedding inclusive design practices and processes, and establishing a culture of digital inclusion that centres on open dialogue and practical action, organisations can achieve better products and better experiences for all their customers alike.

> **"**
> *Really informing people and making them aware is what I'd say is the biggest challenge to accessibility.*
>
> **Jonathan Lazar, professor of computer and information science at Towson University**
> **"**

# About Inviqa

We craft digital experiences that change the game for our clients and their customers.

Our teams combine **strategy**, **customer insight**, and **technology engineering** to help brands like Virgin, Radley, and Arsenal FC to rapidly solve customer problems and achieve their goals faster.

We're a team of more than 200 strategists, designers, technologists – and everything in between. Our work has been recognised at the likes of The Webby Awards, The Lovie Awards, and UXUK, and we're a regular feature in Econsultancy's Top 100 Digital Agencies Report.

## Our accessibility services

From consulting and audits, to training and testing, we can help you build a culture of accessibility to ensure your digital products and services are inclusive and accessible to people with disabilities. Get in touch to start exploring your options.

- Web accessibility audits
- Web accessibility design and development
- Web accessibility training
- Web accessibility testing

# Accessibility brand stories

**Accessibility delivers conversion boost for SSE Energy**

With an ageing customer base, SSE Energy is focusing on accessibility – and reaping the rewards of inclusive design.

To date, we've helped the energy company complete:

- Accessibility training and stakeholder education
- Accessibility audit
- Remedial code to meet technical compliance
- Redesign and rebuild of core acquisition journeys to improve usability and accessibility
- Development of new design principles, design patterns, and style guide to support inclusive design
- Accessibility testing with real customers

This going focus on accessibility and usability has delivered tangible wins for the business, including:

- A **200%** conversion rise for the phone and broadband online sign-up process
- A **79%** conversion rise for the boilers and heating sign-up process
- A **61%** conversion rise for the energy sign-up process
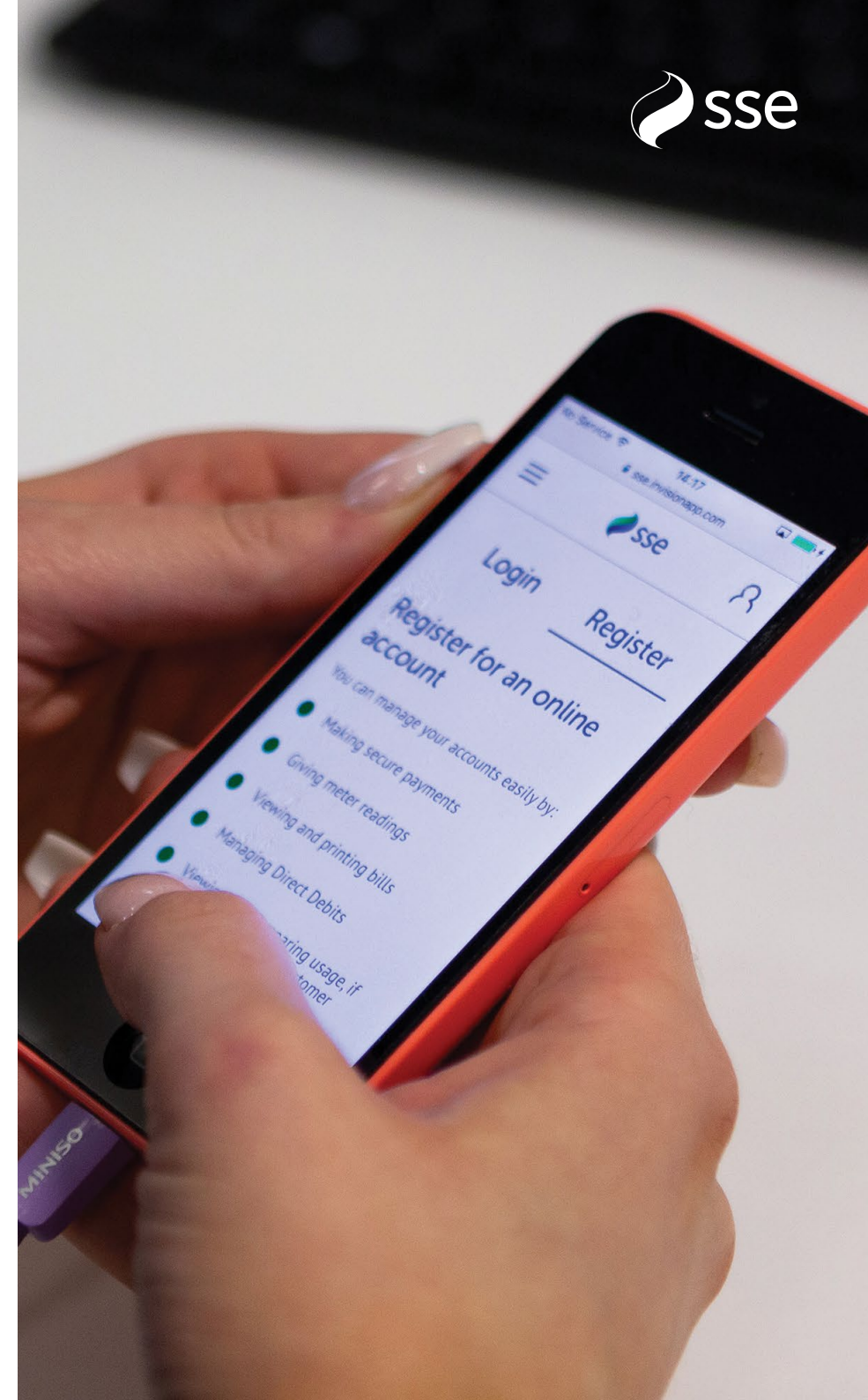
## Accessibility improves usability for NHS platforms

Before a major overhaul in 2016, the NHS Digital websites, spanning more than 400 services, were difficult to use and navigate.

The new site launched with a focus on:

- Meeting WCAG guidelines
- clearer written content
- simpler interface
- reduction in use of PDFs
- removal of banner ads

The launch of the new website reduced the time users needed to complete tasks or find the information they needed. Pages with AAA accessibility ratings performed particularly well, with daily users increasing from 15,000 to 26,000, and with significant reductions in average time spent on page.
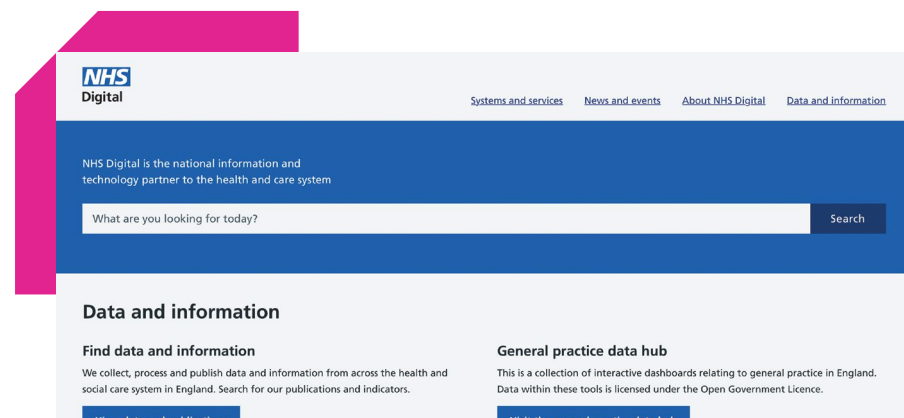


## Tesco boosts online sales with RNIB collaboration

Tesco teamed up with the RNIB to make its online grocery service more accessible to blind customers.

The new website was designed and delivered with accessibility in mind, and user tested with 70+ blind and partially-sighted shoppers.

Tesco discovered that customers without visual impairments found the new interface easier to use, and secured the following results:

- Revenue from online sales increased to £13 million annually
- 352% year-on-year online sales growth
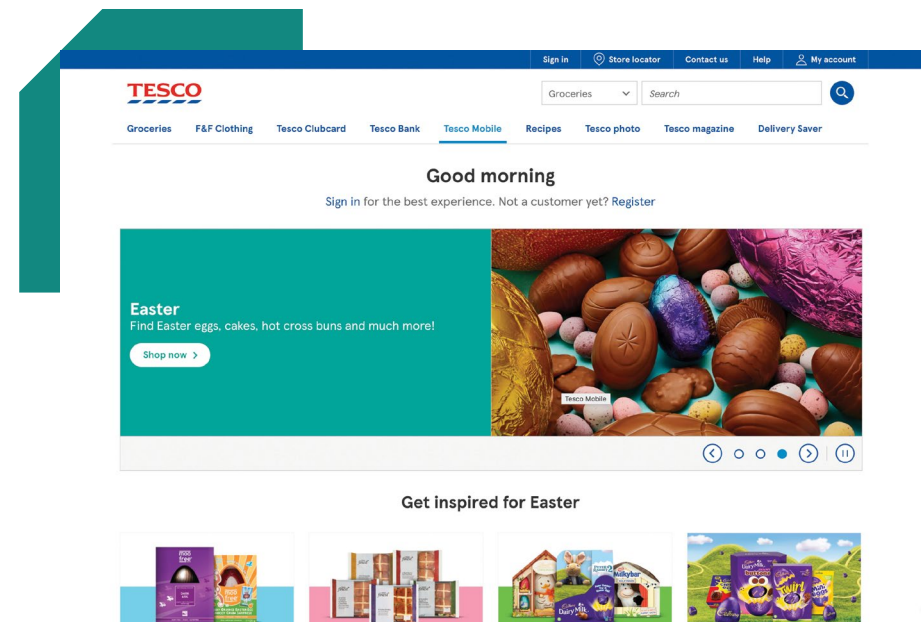
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# digital experiences

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